

**MODELS:** Northrop (Army) P-61, P-61A, P-61B (Approved 4/13/47)

**SPECIFICATION NUMBER:** L-14-2

(Eligible for Certification in Limited Category only.)

(Holder of Limited Type Certificate: Northrop Aircraft, Inc., Hawthorne, CA)

Engines	2 Pratt & Whitney R-2800-10, -10W or -65
Fuel	Grade 100/130
Engine limits	Maximum continuous (neutral auxiliary) (Sea level) 46.0 in.Hg., 2550 rpm (1675 hp) (5500 ft.) 44.5 in.Hg., 2550 rpm (1675 hp) Takeoff (5 minutes) 54 in.Hg., 2700 rpm (2000 hp) Maximum continuous (low blower) (7000 ft.) 49.5 in.Hg., 2550 rpm (1580 hp) (18,200 ft.) 49.5 in.Hg., 2550 rpm (1625 hp) Maximum continuous (high blower) (19,700 ft.) 50.0 in.Hg., 2550 rpm (1535 hp) (23,000 ft.) 50.0 in.Hg., 2550 rpm (1550 hp)

Propellers	Curtiss C542S-A56 hub; 714-7C2-12 blades, 12'2" diameter. Pitch stops (42 in. sta.) 28 degrees low; 58 degrees high; 89.5 degrees feather.										
Airspeed limits	(See NOTE 2) <table border="0"> <tr> <td>Altitude</td> <td>Glide or Dive Speed</td> </tr> <tr> <td>0 to 10,000 ft.</td> <td>420 mph</td> </tr> <tr> <td>10,000 to 20,000 ft.</td> <td>370 mph</td> </tr> <tr> <td>20,000 to 30,000 ft.</td> <td>300 mph</td> </tr> <tr> <td>Level flight or climb</td> <td>300 mph</td> </tr> </table>	Altitude	Glide or Dive Speed	0 to 10,000 ft.	420 mph	10,000 to 20,000 ft.	370 mph	20,000 to 30,000 ft.	300 mph	Level flight or climb	300 mph
Altitude	Glide or Dive Speed										
0 to 10,000 ft.	420 mph										
10,000 to 20,000 ft.	370 mph										
20,000 to 30,000 ft.	300 mph										
Level flight or climb	300 mph										
Maximum weight	30,000 lbs.										
C.G. range	20.4 percent MAC to 30 percent MAC (gear down)										
Datum	Wing leading edge										
MAC	126.3 inches L.E. MAC (0.00)										
Other operating limitations	Army Technical Order No. AN01-15FB-1										
Certification basis	Limited Type Certificate No. 14 (CAR 9 effective 11/21/46)										
Production basis	None may be produced under this approval										
Export eligibility	Not eligible for a Certificate of Airworthiness for Export										

**Equipment:**

No equipment other than engines and propellers are specified. However, such equipment as required by Civil Air Regulations Part 43.30 for the particular operation authorized for NC aircraft must be installed. Also, any additional equipment necessary for the proper operation of the aircraft.

In addition, the aircraft may incorporate such military equipment (except armament) as was originally incorporated in the type for military or naval service. Additional equipment may be installed as can be substantiated on the basis that it presents no obvious hazard to safety.

NOTE 1. Weight and Balance Report including list of equipment included in the certificated empty weight must be submitted for each aircraft. Army or Navy weight records in current condition may be submitted in lieu of an actual weight. The equipment list need include no more than the following:

- (a) Required equipment as defined under "Equipment" above.
- (b) Additional items as may be reasonably considered removable and are so located or of such weight that their removal or addition could noticeably affect the weight and balance of the aircraft. Items built into the aircraft structure need not be listed. The equipment list must be prepared by the applicant for the approval of the certificating FAA representative, and in such form that it can be attached to the Operation Limitations.

NOTE 2. The following placards must be prominently displayed in the positions indicated:

- (a) in full view of passengers: "This is a military type aircraft and under the Civil Air Regulations shall not be used for the carriage of passengers or cargo for compensation or hire."
- (b) In the cockpit in full view of the pilot
  - (1) "Do not extend full flaps above 175 mph."
  - (2) "Do not operate landing gear above 175 mph."
  - (3) "Maximum landing gear emergency operation speed 130 mph."
  - (4) "Do not operate automatic pilot below 140 mph."
- (c) The airspeed indicator shall be marked as follows:
  - (1) A red radial line at 420 mph.
  - (2) A green radial line at 300 mph.
  - (3) A yellow arc (precautionary range) shall extend from the green radial line to the red radial line.

NOTE 3. The following statement must appear on the Operation Limitations:

"This airplane must be operated at all times within the limitations set forth in Army Technical Order No. AN-01-15FB-1 except for limitations specifically called out in Aircraft Specification AL-14 in which case the values given in the Specification must be observed. A copy of Army Technical Order AN-01-15FB-1 and Aircraft Specification AL-14 must be carried during flight." In all cases it will be the responsibility of the applicant to secure copies of the Army Technical Orders. The FAA does not have these documents available for distribution.

NOTE 4. All structural repairs should be made in accordance with Army Technical Order AN-01-15FB-3 reference AN-01-15FB-2 for maintenance. If any repairs or modifications (other than those covered in the pertinent Army repair manual) are made prior to and/or subsequent to NL certification, it is the responsibility of the owner to furnish sufficient evidence to a FAA representative to show that the modified airplane maintains the same degree of airworthiness as the original. The FAA can give no technical assistance on such matters since complete structural data for NL aircraft are not required by Part 9 and therefore are not available in the FAA.

NOTE 5. Prior to obtaining certification for night operation, the following

modifications to the exterior lighting must be made in order to comply with the general requirements of the Civil Air Regulations.

(1) Position Lights

- (a) Wing Tip - If Type A-7 or A-8 light assemblies are installed, they must be replaced by type certificated light assemblies. If Type A-9 (AN-3033-10 or AN-3033-5 through -8) light assemblies are installed, they may be satisfactorily modified by painting the sand blasted portion of the inner surface of the AN-1042-3 and -4 covers black. The AN-3033-9 or AN-3033-1 through -4 light assemblies are satisfactory without modification.
- (b) Tail - The Type D-1 (AN-3091-1 through -3) and the Type D-2 (AN-3092-1 through -3) light assemblies are unsatisfactory and must be replaced with type certificated unit.

(2) Position Light Installation

The position lights shall be installed to comply with the requirements of the CAR, Parts 15.2 and 3.538.

(3) Position Light Circuit and Control

The position lights (wing tips and tail) shall be controlled by one SPST switch. The circuit should be protected by its own fuse or circuit breaker. The individual wing tip and tail light switches with dim and bright positions shall be removed and the dimming resistors presently installed shall be disconnected.

(4) Other Exterior Lights

With the exception of the landing lights, any other exterior lights are not required and may be removed if so desired.

The list of mandatory changes required prior to original certification may be obtained from Federal Aviation Administration, Washington, D.C. 20590.